

Inspection and Construction Guidelines

For Major Commercial Projects

This document is a guide for contractors and developers of major commercial projects in the City of Bellevue. It outlines the expectations, procedures and general requirements of the inspection and construction process.

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Permits

The general contractor is responsible for ensuring that all proper permits have been obtained. Apply for permits online at MyBuildingPermit.com

Required permits must be posted and accessible on the job site.

Work begun prior to the issuance of a permit is subject to a Stop Work Order and double permit fees.

Contractors

All contractors must be properly licensed by the State of Washington (including out-of-state contractors).

All contractors must obtain a city business license.

The general contractor must ensure that all subcontractors are properly licensed.

Each contractor is responsible for knowing the city code pertaining to the project.

Inspection Process

Preconstruction Meetings

Preconstruction meetings (precons) are required by the building division prior to the start of construction. The following precons are to be scheduled as required on your permit.

- Major Building Projects (<u>Preconstruction Meeting Requirements for Major Building Projects</u>)
- On-Site Building (building, mechanical, electrical and plumbing as required)
- Clearing & Grading

The building division requires the following formal meetings/precons. These are to be scheduled with the building inspection supervisor.

- <u>Shotcrete</u> (temporary and permanent walls)
- PT (Post Tension) Deck Construction
- Smoke Control & Emergency Wiring
- Pre TCO/CO (Temporary Certificate of Occupancy/Certificate of Occupancy) meeting.
 Schedule a minimum of 30 days prior for small to medium size projects and up to 3-6 months prior for major projects.
- Pre-CO meeting (At the discretion of the inspection supervisor)

The building inspector may require the following additional precons on site:

- Firestopping
- Curtain wall
- Structural steel
- Exterior wall veneer (stone, masonry, etc.)
- Equipment protection at parking garages (to include building, mechanical, electrical and plumbing)
- Accessible elements for Type A & B units, public restrooms, etc.
- Pedestrian protection
- Inspection Expectations
- Suspending Ceilings
 - o New
 - o **Existing**

Contact the Transportation, Fire, Utilities and Land Use Departments for information regarding their required preconstruction meetings.

Inspection Requests

Request or cancel an inspection, or obtain an inspection status report online at MyBuildingPermit.com. You can also call the inspection scheduling line at 425-452-6875. Inspection requests must be made before 4:30 a.m. to obtain same-day inspections.

It is important that area, floor, unit or suite inspection location information be noted on the inspection request in case the inspection contact is unavailable at the time of the inspection. If this information is not provided, you may not receive your inspection.

On the day of your scheduled inspection, visit <u>MyBuildingPermit.com/Today's Inspections</u> to view inspections scheduled in Bellevue for the current day and to contact your inspector regarding an arrival time, or call 425-452-4570 between 7 and 8 a.m. the day of the scheduled inspection.

Areas of inspection must be ready when the inspection is requested. No area requiring an inspection can be concealed prior to theinspection. The city is required by law to perform inspections prior to concealment. Areas covered without inspection will be required to be uncovered, at the contractor's expense, to allow inspection. It is the general contractor's responsibility to ensure that the required inspections are completed and approved prior to concealment.

For congested jobsites with limited parking, designated parking must be made available to inspectors and posted as *City Inspection Parking Only*. Multiple spaces may be required based on the size, scope, frequency of inspection visits, and the availability of area parking. Failure to provide this parking will result in delayed or cancelled inspections.

Contractors must address limited access issues due to security, lack of elevators, etc., prior to the inspector's arrival.

Off Hour Inspection Requests

Inspection hours for Development Services building inspectors (building, mechanical, electrical and plumbing) are from 6:00 a.m. to 3:30 p.m., Monday through Friday. Special arrangements must be made for inspections outside normal hours.

Contact the inspector or the inspector's supervisor at least three days prior to the inspection. Once the inspection is approved, you will be contacted to arrange a date and time for the inspection.

Refer to Inspection, Reinspection, Outside Normal Hours & Overtime Fees for more information.

Inspection Contact Information

Maintain an inspection contact sheet in the plan/permit area. Site construction contacts for the various disciplines receiving inspections should have their contact information posted. City inspector names and numbers, special inspectors and the engineer of record should also be posted on this document or in the same location.

Special Inspections

Special Inspections will be documented on the approved plans. They may also be requested by the building inspector.

Special inspectors must have a Certificate of Registration for each type of inspection performed. A resident inspector will be required for large and complex buildings, as determined by the city during plan review. It is recommended that a copy of all special inspectors' registrations, picture IDs and contact numbers be available on site for the building inspector.

Special inspection reports must refer to the permit number and job address as they appear on the building permit. Copies of all reports must remain on site with the permit and approved plans.

Requests for inspections must be made through the city even when a special inspector is on site. City inspectors are responsible for checking the work to make sure it complies with the code and that the special inspector is fulfilling his or her obligations.

All work must be approved by the building inspector prior to concealing work, regardless of special inspection approval, unless waived by the building official or the building inspector.

The city must be provided with a summary letter from the special inspection agency summarizing the work inspected. This will be required prior to the issuance of a building final or TCO/CO. A copy of this letter must also remain on site for the building inspector. Special inspections include but are not limited to structural inspections for concrete and steel erection, fire proofing, geotechnical and smoke control.

Inspection Corrections

Each contractor requesting an inspection should have, on site, a representative that will accompany the inspector during the inspection process. The contact phone number of this person must be the same as the contact number on the inspection request. On larger projects the building inspector will provide an inspection sign-off book. This book is used to track inspection approvals throughout the life of the project. The contractor must help maintain this book by making it available to all inspection staff.

If corrections are issued, the work must be corrected and another inspection scheduled before proceeding to the next phase of the project.

Re-inspections requested when corrections have not been completed and repeated requests for inspections made when work is incomplete are subject to a re-inspection fee.

Work being done without approval or repeated disregard for the inspector's corrections may be subject to a Stop Work Order. No inspections will be done, per the requirements stated on the Stop Work Order, until the inspector's corrections have been addressed.

Construction Noise Control

The <u>Noise Control Ordinance</u> applies to all commercial and multifamily construction and new single family homes. Construction noise outside the allowable hours is prohibited per <u>BCC</u> 9.18.040.

Construction related noise is allowed	Construction related noise is not allowed	
• Weekdays 7:00 a.m. to 6 p.m.	Outside allowable hours	
• Saturdays 9:00 a.m. to 6 p.m.	Sundays and holidays	

Construction related noise violations are called in to 911. Reports of noise violations to the Police Department are sent to the Code Compliance Division and may result in a monetary penalty and/or a Stop Work Order.

Pedestrian Protection

Pedestrian protection must be in place prior to construction, remodeling or demolition activities. This includes pedestrian walkways adjacent to lot lines and pedestrian walkways which pass into or through an area under construction or demolition.

Covered walkways require a permit and plan review.

Pedestrian protection must be in place and inspected prior to construction adjacent to and at the same grade or above as detailed in <u>IBC 3306.1</u>. Failure to have this in place and approved prior to construction will result in a Stop Work Order.

Height of Construction	Distance from Construction Sidewalk, Walkway or Lot Line	Type of Protection
8 feet or less	Less than 5 feet	Construction railings
8 feet or less	5 feet or more	None
More than 8 feet	Less than 5 feet	Barrier and covered walkway

Height of Construction	Distance from Construction Sidewalk, Walkway or Lot Line	Type of Protection
More than 8 feet	5 feet or more, but not more than 1/4 the height of construction	Barrier and covered walkway
More than 8 feet	5 feet or more, but between 1/4 and 1/2 the height of construction	Barrier
More than 8 feet	5 feet or more, but exceeding 1/2 the height of construction	None

Revisions

Changes or revisions to approved plans may require resubmittal of the plans and further review before work can begin or continue. Consult the building inspector on your project.

<u>Phasing of projects</u> and changes to previously approved phasing plans will be treated as a revision and will have to go through the plan review process.

Contact the Transportation, Fire, Utilities and Land Use Departments regarding their revision requirements.

Revisions Requiring Plan Review

- Structural changes requiring calculations from the engineer of record.
- Non-structural changes:
 - Egress or exit system and its components
 - Fire resistive construction assemblies
 - Change in use/occupancy
 - Change in construction type
 - Change in phasing
 - Accessibility
 - Energy Code
 - Significant changes to mechanical, electrical or plumbing systems (revisions required as directed by the mechanical, electrical or plumbing inspector)

Revisions Not Requiring Plan Review

- Work that does not require a permit, per city code.
- Interior finishes not regulated by City code.

Submitting Revisions and Additions

Project scope changes, revisions and additions can be submitted on MyBuildingPermit.com or at city hall. Identify revised or added information by circling, noting or otherwise consistently marking. The preferred method is to cloud the area, mark with a numbered delta referring to the change(s) and indicate the date of the change. Submit revisions as soon as possible.

Revisions may be submitted on an issued permit if the permit has not been given a final inspection approval or a Certificate of Occupancy; otherwise, a new permit application must be submitted.

Limited Use for Buildings Under Construction

Use of Parking Garages Prior to Temporary Certificate of Occupancy

Parking garages that are part of the scope of work may be used for construction parking prior to Temporary Certificate of Occupancy (TCO) or Certificate of Occupancy (CO) provided that certain conditions have been met.

The Fire Department provides an <u>information sheet</u> detailing the requirements for this type of use, including but not limited to the following:

- The fire sprinkler system is placed in service (including water flow notification).
- The parking garage has been approved by the building official and fire marshal.

Installation of Furniture or Furnishings Prior to TCO

Authorization to install any equipment or furniture within a building or area where construction work has been permitted must be approved by the field inspectors. This would include:

- Commercial building Installation and placement of office furniture.
- Multifamily building Completion and use of select units within an incomplete building for use as model units or a sales office.

The approval for advance placement of equipment and/or furniture in a commercial office space does not give approval for any kind of business to be conducted until all appropriate permits have been signed off and final approval for occupancy has been given.

A preconstruction meeting is required with the fire and building inspectors, the building inspection supervisor, the general contractor and a representative of the building owner. Attendance by the mechanical, electrical, and plumbing inspectors may also be required. This meeting will address some basic requirements needed prior to approval for use of these types of spaces.

The approval for advanced furniture installation and the subsequent use of residential units or areas as model units or sales offices would require additional measures and inspections, as follows:

- Sprinkler system coverage and water flow alarm notification.
- Completion of any required finals or partial finals deemed necessary by the fire or building inspector.
- Water and fuel gas systems turned off to the units.
- Water Closets posted "Not for Use."
- Interior finishes complete, including but not limited to handrails and guardrails within the space as well as exterior patios and decks serving the model unit.
- A comprehensive list submitted to the fire and building Inspectors identifying which units are being used as model units.
- A narrative submitted to the fire and building inspectors detailing the safety protocols and procedures to be used to address marketing personnel and public safety, and access and egress for the space(s) in question.

Limited Occupancy for Training or Stocking

This includes tenant improvement (TI) projects requesting early occupancy for stocking or training prior to opening to the public. This request typically occurs with service oriented businesses such as hotels, restaurants and health clubs, but can also occur with larger scale retail tenant occupancies and should be taken into consideration when scheduling project construction, developing the phasing plan and determining occupancy deadlines.

TI projects constructed in tandem with a major project shell and core cannot be approved for occupancy until the shell and core has received a TCO for the portion of the building in which the TI is located. Depending on the occupancy approval requirements, the TI will require either a TCO or a partial final or final before this limited or early occupancy will be granted. This type of occupancy requires advanced approval by the various departments involved in the construction of the space and supporting elements and systems, and should be discussed in detail at the Pre-TCO or precon meeting. When this type of early occupancy is expected or requested, the building inspector must be contacted for direction on how to proceed. Where staff training involves the use of commercial kitchens, the equipment and related systems must be approved for final or partial final, by all related inspection disciplines including building, fire, mechanical, electrical and plumbing. For projects that have new utility side sewer connections, the Utility department must also approve the use.

Phased Occupancy

Phased occupancy requires plan review and approval from the city. The owner is responsible for submitting an occupancy phasing plan for review, either as part of the original submittal set or as a revision. The submittal is to include the following:

Phasing Plan Narrative

- A description of each phase.
- The schedule of each phase.
- How construction activity will be separated from civilian occupants.
- How access and egress will be accomplished for both the occupants and construction personnel.
- How vehicle traffic and parking will be addressed with regards to the separation of civilian occupants, construction personnel and construction materials.
- How fire and life safety systems are being completed and affected by the phased construction.

Phasing Plan Drawings

- Building Phasing Plan
 - Show each phase by sequence.
 - o Identify each area of each phase by text and by color border.
 - o Include plan views for each floor with unique and temporary exiting.
 - Plan views for each similar floor are not required and can be grouped and labeled as typical floors.
 - Identify any temporary construction elements, such as chain link fencing or temporary walls and doors, being used to separate construction personnel and activities from civilian occupants.
 - o Include identification of site work elements, such as public ways or landscaping, by phase.
- Right of Way Restoration Plan
 - Provide a site restoration plan for sidewalks, road surfaces, streetlights and other transportation and/or right-of-way features.

When considering phased occupancy, the following questions should be considered:

- Will the degree of safety in the occupied space be equal to that which is provided in an existing building with ongoing extensive remodeling work?
- Will the proposed occupancy be provided the same degree of safety the finished building is designed to provide?
- Will it be possible to isolate construction in the building so it will not affect any occupied area used for access or exiting?
- Have the identified site and building elements for the project been completed per the approved plans and approved by the appropriate inspector?
- Is construction of the basic building complete (exterior walls, roof, structural members and all major components of the building including tower cranes, hoist ways and removal of exterior scaffolding)? Does the building exterior look like the approved elevation plan?
- Will the phased project be completed within the timelines set forth in the primary permits?
- What systems are needed to support occupancy (water, sewer, drainage, fire protection, smoke control, ingress, egress, etc.), and are they operational, inspected and approved?

Phased occupancies can be approved under the provisions of a TCO. All city departments and divisions affected by the phased construction must approve the building and site for phased occupancy. These departments and divisions can include Fire, Utilities, Transportation, Parks, Clearing and Grading, and the Building Division (building, mechanical, electrical and plumbing).

In addition to all permitted work required for the occupancy, all fire and life safety systems and components for the entire building must be complete, inspected and approved. This can include but may not be limited to the following:

- Exiting systems
- Active and passive building and occupancy protection systems
- Fire alarm systems
- Smoke control systems
- Emergency lighting and signage
- Accessibility systems, routes and signage
- Exterior envelope
- Any mechanical, electrical, plumbing, fire, utility, transportation, land use or clearing & grading elements or systems which serve the occupancy

Final Inspections

Prior to the building final and approval for occupancy, all subcontractor permits are required to have a final inspection and sign-off with either partial approval with conditions, an approval to occupy or an approved final. This approval must be documented on-site in the form of a sign-off on the permit and/or a sign-off on a correction notice referencing the appropriate permit(s).

For new buildings under construction, the shell and core permit must have obtained a TCO before a tenant permit can be approved for occupancy of any sort, including but not limited to the stocking of goods and materials, employee orientation, training and/or the use of equipment by employees or the public.

All revisions and deferred submittals must be approved, and related fees must be paid prior to the final inspection approval for those projects that do not require a TCO/CO. Check with the Development Services Permit Processing Center to ensure that all necessary submittals have been made and fees paid.

When calling in finals, the following inspection sequences and dependencies should be considered:

- Mechanical, electrical and plumbing permits require final or partial approval prior to building approval for final or TCO/CO.
- Utility approval is required before plumbing can be approved for projects that require a TCO/CO.
- Smoke control permits (identified by the letters FH) require final approvals by fire, mechanical, electrical and building. Building must approve prior to electrical approval and before fire can approve and close the permit. The approval to test the smoke control system must be given by mechanical, electrical, building and fire inspection staff prior to testing. The "ok to test" inspections can be found on the smoke control permit (identified by FH at the end of the permit number). Once testing is complete, the FH permit cannot be signed off until the FH finals are approved by mechanical, electrical, building and fire. Forty-eight hours prior to mechanical and fire inspector approval, a summary letter certifying smoke control system compliance must be provided by the smoke control special inspector to the mechanical and fire inspectors. The TCO for the project will not be approved until the letter is submitted and has been approved. The final test report must be submitted as a revision through Permit Processing to mechanical and fire reviewers as soon as possible. No Certificate of Occupancy (CO) will be approved until the report is reviewed and approved.

- Fire alarm permits (identified by the letters FA) require final approval by electrical before fire can approve and close the permit.
- Land Use approval is required before clearing & grading can be approved for projects that require a TCO/CO.

Certificates of Occupancy

There are two types of Certificates of Occupancy:

- Temporary Certificate of Occupancy (TCO)
- Certificate of Occupancy (CO)

To determine if a TCO/CO is required for your project, refer to the information located on the front page of your building permit or contact your building inspector. These certificates will be issued by the building official to the property owner prior to occupancy of:

- All new commercial and multifamily buildings.
- Some substantial commercial and multifamily additions.
- Commercial tenant improvements involving a change in use.

A TCO can be issued before a CO under certain conditions if the project is not entirely complete. The conditions are:

- All life/safety issues are resolved.
- Only incidental work remains.
- The owner agrees to meet the conditions of approval identified by the various city departments.

At a minimum 30 days prior for small to medium size projects and up to 3-6 months for major projects, the owner or owner's representative should contact the building inspection supervisor at 425-452-4570 to set up a preoccupancy meeting. The meeting should include the developer, owner, construction superintendent and subcontractors along with all project related city inspection staff required to approve the TCO/CO. The meeting discussion focuses on general information regarding the process and timelines; detailed, issue-specific discussions take place outside of the preoccupancy meeting with the pertinent inspector. Approximately 30 days before the occupancy target date, the owner or owner's representative should notify the occupancy coordinator to begin the occupancy process and paperwork.

Before a TCO or CO can be processed, the general contractor or owner must satisfy the requirements of the Building, Clearing & Grading, Fire, Land Use, Transportation and Utilities Departments. As final inspections are requested and performed, outstanding conditions will be noted by inspectors for each department. Conditions that can be completed after the TCO is issued will be included or referenced in the TCO document.

Department staff will sign off the project in the city's permit tracking system and will give the approval to apply for the TCO or CO. All revisions, deferred submittals and outstanding fees must be approved and paid before a CO can be granted. Once approvals have been given and outstanding fees paid, the process to issue the TCO or CO usually takes 3-5 days, so it is imperative that the construction schedule allow for this processing time. When all signoffs have been obtained, you will be called by the occupancy coordinator to arrange a time to pick up the TCO or CO.

A TCO is valid for 90 days. Conditions noted under the TCO must be completed and a request for CO initiated prior to the expiration date of the TCO. If all conditions are not met and the CO is not obtained before the TCO expires, the city may issue a Civil Violation Notice (CVN). If a CVN is issued, the owner may be required to attend a hearing and may be subject to monetary penalties.

Site Requirements for Occupancy

Clearing and Grading Requirements

- Final grading and construction of rockeries and/or block walls is complete.
- All soils are landscaped or covered with hard surfaces.
- All drainage is tightlined to the appropriate storm system.
- Submission of any final geotechnical letters covering:
 - Fill placement.
 - o Rockery/block wall placement, including drainage to city standards.
 - o Retaining systems (MSE walls, shoulder pile walls, etc.).
 - o Additional recommendations by the geotechnical engineer.
- Parks Department trail systems requirements are met.

Land Use Division Requirements

- For phased projects, vehicular, pedestrian and barrier-free access available to, through and possibly from each phase.
- Approval of mechanical equipment screening as indicated on the approved plans.
- Surface parking areas and related landscaping, lighting and walkways.
 - parking stalls, crosswalks and directions of travel marked using approved methods, and clearly visible.
- Lighting for streets, walkways, parking areas and building exteriors.

- Landscaping for the entire site perimeter, including frontage planting strip(s). If TCO is requested prior to completion of the landscape installation, the applicant must file with the Development Services Department a Landscape Installation Assurance Device equal to 150 percent of the cost of labor and materials for any landscaping that has not yet been installed. Prior to issuance of a CO, the applicant must file a Landscape Maintenance Assurance Device for a one-year period in the form of an assignment of savings or letter of credit for 20 percent of the cost of labor and materials for all landscaping on the site.
- Site-related structures and amenities in or in support of the phase.
- Recording of all required access easements.

Fire Department Requirements

- Access for emergency and/or fire apparatus.
- Fire lane markings and signage, if required.
- Fire protection equipment protected against vehicular damage, properly signed, and accessible.
 - o applies to fire hydrants, Fire Department Connection (FDC), Double Check Valve Assembly (DCVA) and Post Indicator Valve (PIV).
- Street address numbers.

Transportation Department Requirements

• Application for a Right of Way Use Permit is required for the phased portion of work.

Building Structure Requirements for Occupancy

Fire Department Requirements

- Automatic sprinkler system and standpipes
- Fire alarm system (Please note that systems testing typically takes up to two weeks to complete for complicated projects such as condos or when integrating multiple tenant improvement spaces)
- Fire extinguishers
- Fire pump(s)
- Fixed fire protection system(s)
- 800 MHz radio system
- Smoke control systems are complete and inspected for the entire portion of the building being served. Up-to-date approved plans are required. (Please note that systems testing typically takes up to two weeks to complete for complicated projects such as condos or when integrating multiple tenant improvement spaces)
 - o Smoke control test summary letter submitted to fire review prior to TCO approval.
 - o Smoke control final report submitted before CO.
- Emergency generator

- Special egress control device(s)
- Required signage and emergency evacuation procedures in place.
 - Signage includes stairwells, stair doors, fire command room or fire alarm panel, sprinkler floor control valves, sprinkler riser room, fire department connection (FDC), fire pump room, electrical room, generator room, hazardous materials, occupant load, room or suite numbers, etc.
- Required exit ways and stairwells.
- Required exit signage.
- A Fire Safety and Evacuation Plan (*draft*).
 - o Final approved version (3 copies) must be submitted for CO approval.
- Required separation between occupied area and continued construction phasing.
- Re-acceptance testing must be performed after system components are added or deleted;
 after any modification, repair or adjustment to system hardware or wiring; or after any
 change to software. All components, circuits, systems operations or site-specific software
 functions known to be affected by the change must be thoroughly tested. In addition, 10
 percent of initiation devices that are not directly affected by the change (up to a maximum
 of 50 devices) must also be tested and proper system operation verified.
- Special operations such as commercial cooking, high-piled storage or fuel storage/use require a case-by-case determination for substantial code compliance before such work is permitted. In some cases, a separate Fire Department Operational Permit will be required.
- Knox boxes with appropriate keys/cards are in place.

Building Division Requirements

- Exit ways (without obstruction to public way) serving occupied areas including lighting, signage, rails, etc.
- Accessibility signage complete in all areas.
- Emergency lighting inspection.
 - May require an off-hours inspection to confirm lighting coverage in non-daylight conditions.
 - Emergency lighting powered by a generator may require inspection coordination with electrical and fire inspectors.
- Smoke control systems are complete and inspected for building approval as required under Fire Department Requirements.
- A temporary exiting plan may be required for each phased area.
- Fire separations in any area that could affect the occupied space, generally up through the floor above occupancy.
 - Completion of shafts and firestopping in the required areas is a necessary part of fire separation.

- Building envelop air barrier testing complete and summary report submitted as a revision to building review.
- Issuance of all permits and plans including revisions for work that is complete or in progress.
 - o must reflect the as-built conditions of the building and its equipment.
- Construction debris removed from occupied areas.
- Elevator approvals obtained from the Department of Labor & Industries.
- Provide the city with a summary letter from the special inspection agency summarizing the work inspected.
 - A copy of this letter must remain on site for the building inspector
- Condominiums require submittal of a building enclosure letter as required by RCW 64.55.
 - Submitted by the design professional hired to certify that the building was constructed in compliance with the building enclosure design documents.
- Condominium projects wishing to build out Type A accessible units to Type B requirements must follow the policy outlined in the <u>Type A Condominium Accessibility</u> code interpretation procedure.

Mechanical Requirements

- A final walkthrough of the entire building.
 - Up-to-date approved plans are required.
- All appliances and mechanical equipment operational.
 - o Includes pilot lights lit on fuel-fired equipment.
- For projects with parking garages, a final walkthrough of the entire garage will be done. Upto-date approved plans are required.
- Bollards or equivalent types of protection are a minimum 48 inches high and are installed to protect all equipment and systems that can be damaged by vehicles. (A precon inspection is recommended prior to placement).
- Testing of garage ventilation witnessed by inspector.
 - o Includes operational testing of CO sensors.
 - o Manufacturer's listing and installation requirements available for inspection.
- All mechanical dampers not associated with smoke control are tested and witnessed by the mechanical inspector.
 - Include fire inspector as necessary.
- Dampers actuated by a duct detector will be subject to a manometer reading.
 - Have the manufacturer's listing and installation requirements on hand and available to the inspector.
- A list of all dampers identified by location.
 - o Ceiling areas must be open and duct access doors removed for testing.
- Manometer testing on duct smoke detectors.

- o Have manufacturer's listing and installation requirements available for inspector.
- Smoke control systems are complete and inspected for mechanical approval as per fire department requirements.
- Mechanical final inspections related to smoke control systems should be coordinated and scheduled with the inspector 72 hours in advance to allow for coordination with other staff and other conflicting project schedules.

Plumbing Requirements

- Water meter installed (see Utilities Requirements) and a Water Service Agreement filed with Utilities.
- Required restrooms for the occupied areas.
 - Labeled according to the approved plans.
- All plumbing fixtures in occupied areas complete and in service.
- Occupied commercial kitchens approved by the King County Health Department prior to the plumbing final.
- Clean out oil/water interceptors and sumps.
 - All alarms for sumps and ejectors must be working and labeled.
- Grease traps tested watertight, inspected and approved.
- All plumbing systems labeled in the parking garage.
- Water heaters on and in operation.
- Plumbing equipment weighing more than 400 lbs. has been engineered for gravity and lateral support.
 - o Requires plan review.
- Bollards or equivalent types of protection are a minimum 48 inches high and are installed to protect all equipment and systems that can be damaged by vehicles. (A precon inspection is recommended prior to placement).
- Water piping within 100 feet of the garage opening is heat traced and insulated.
- Traps within 100 feet of the garage opening are insulated.
- Roof is cleaned of all debris.
- Roof strainers installed and all vents are 10 feet away from fresh air intakes or 3 feet above.
- All membranes for roof drains, overflows, decks, etc., water tested and inspected.
- All backflow devices serving occupied areas.
 - test reports completed.
 - devices labeled and identified.
- Floor drains installed in pressurized mechanical rooms equipped with deep seal traps with ½ gal/24 hr. electronic primers.

Electrical Requirements

- Required area and egress illumination installed, tested, approved and in service.
- All switches and receptacles required by code installed.
- Electrical wiring and equipment required by code installed and complete.
- Electrical raceway systems complete.
- All emergency electrical systems installed, tested, approved and in service.
- All emergency and legally required power systems installed, tested, approved and in service.
- Smoke control systems are complete and inspected for electrical approval as required under Fire Department Requirements.
- All boxes have covers installed.
- All unused openings in boxes and enclosures are closed.
- All service equipment, distribution panelboards, subpanels and distribution system enclosures have dead fronts and panel covers installed.
- All required permanent labeling completed.
- Any wiring which is not required by code, but not yet complete, is installed in completed enclosures with covers installed.
- Bollards or equivalent types of protection are a minimum 48 inches high and are installed to protect all equipment and systems that can be damaged by vehicles. (A precon inspection is recommended prior to placement).

Requirements for Municipal Utilities

All municipal utility work (water, sewer, and storm drainage) that supports the phase for which occupancy is requested must be tested, operational and approved for use. Facilities must be to final grade, clean, ready for use and protected from future damage (e.g., manhole rings surrounded by concrete collars or cast into sidewalks slabs, protected from sedimentation). In addition, facilities which constitute confined spaces must be complete and ready for use to minimize safety risks. All outstanding fees and charges must be paid prior to occupancy of any phase. At the Utilities Preconstruction Conference, the utilities inspector will provide a copy of the "Commercial Project Acceptance/Occupancy Sequence" handout. The handout details the inspection and acceptance process.

Additional bonding or other sureties, in lieu of completing the utilities work, may be required on commercial and multifamily projects. Occupancy requires that supporting facilities be complete and ready for use.

Prior to approving the Certificate of Occupancy, the entire utility system for the project will be reinspected for completeness, workmanship, potential damage and debris. This is to ensure that all facilities are in good working order before the Utilities Department accepts them for operation. A maintenance/warranty security must be furnished upon the approval of the occupancy of the first phase. Final acceptance of all utility facilities will occur when the entire project is completed, inspected, and approved. The one-year maintenance/warranty period for the entire project, as set forth in the Developer Extension Agreement, begins at final acceptance.

Storm Drainage

The facilities that serve or are downstream of the phase must be tested, operational and approved for use prior to occupancy. This includes but is not limited to:

- Off-site storm drainage improvements.
- Outfalls to streams, lakes and other drainage courses.
- Connections to the municipal drainage system.
- Stormwater detention facilities.
- Water quality treatment facilities.
- Conveyance and collection systems serving the phase.
- Surface drainage features such as curb and gutter, swales, and ditches.
- Erosion and sedimentation controls that protect the drainage system.
- Landscaping in and around drainage facilities.
- Final restoration of the right of way and easement where connections were made.
- Detention tank, vault or pond as-builts; CAD disk and certification letter for detention system compliance with the Engineering Standards and design specifications.
- Water quality facility as-builts; CAD disk and certification letter for water quality system compliance with the Engineering Standards and design specifications.

Wastewater

The facilities that serve or are downstream of the phase must be tested, operational and approved for use prior to occupancy. This includes but is not limited to

- Off-site wastewater system improvements.
- Connections to the municipal wastewater system.
- Side sewers and clean-outs.
- On-site collection and conveyance system, including manholes.
- Grease traps and interceptors.
- Extension of the wastewater system to serve adjacent properties.
- Final restoration of the right of way and easement where connections were made.

Water

The facilities that serve the phase must be tested, operational and approved for use prior to occupancy. This includes but is not limited to

- On-site distribution piping and fire hydrants that serve the phase.
- Extension of the water system to serve adjacent properties.
- Water service lines, setters, meters and meter boxes or vaults.
- Fire service lines, PIVs, FDCs, DCVAs and vaults.
- Valves and valve boxes.
- Water system abandonment.
- Final restoration of the right of way and easement where connections were made.

Requirements for the Transportation System

All transportation elements (curbs/gutters, sidewalks, streetlights, signage, roadway pavement, etc.) that support the phase for which occupancy is requested must be completed prior to issuance of any Certificate of Occupancy. Transportation review and inspection staff will determine which elements must be completed and may grant exceptions based on developer/contractor past performance and staff discretion.

A maintenance/warranty security must be furnished upon the completion of the first phase, and prior to approval of occupancy. Transportation features must be protected from subsequent phase construction activities. Prior to approving occupancy of the final phase, the entire Transportation system for the project will be re-inspected for workmanship and damage.

Final acceptance of all transportation facilities will occur when the entire project is completed, inspected, and approved. The one-year maintenance/warranty period for the entire project begins at final acceptance.

The Transportation elements that serve the phase must be completed, inspected and approved prior to occupancy. These elements include but are not limited to:

- Walkway facilities in the phased area, including a walkway facility that connects the phased area to the street right of way.
- Curb/gutter.
- Pavement facility, including the connection to the street right of way.
- Pavement markings.
- Street lighting.
- Safety railings as required.
- Completion of traffic signal system may be required.
- Transportation management program.